

## REMARKS

Reconsideration and allowance of the present patent application based on the foregoing amendments and following remarks are respectfully requested.

In the pending Final Office Action, the Examiner rejected claims 1, 4-8, and 11, under 35 U.S.C. §102(e), as allegedly being anticipated by Sriram '227 (U.S. Pat. No. 6,665,227).

By this Amendment, Applicant has amended claims 1 and 4-8, has cancelled claim 11, and has added new claims 14, 15, and 16. No new matter has been introduced. As such, claims 1, 4-8, and 14-16 are currently presented for examination.

Regarding the claim changes, claims 1 and 4 have been amended to further clarify the sample selecting steps. Support for the amendments may be found in the originally-filed Specification (*see*, Paragraphs [0017]). New added claim 14 recites another feature of the present invention in processing the frame synchronization, in which support may be found in the originally-filed Specification (*see* Paragraph [0026] together with Fig. 2; and Paragraph [0031] together with Fig. 3). Claims 15 and 16 are newly added to recite one of the variations of the feature in processing the frame synchronization (*see*, Paragraph [0026] together with Fig. 2; Paragraph [0031] together with Fig. 3, and Paragraph [0032]).

Applicants respectfully traverse the rejections, under 35 U.S.C. §102(e) for the following reasons:

### I. Rejections Under §102(e).

The Examiner asserted that Sriram '227 discloses selecting either odd ones or even ones of the sample signal during a first period (Fig. 5, 502) to be a first period (Fig. 2, Signal IN received in first period of Fig, 5, 502). Applicant respectfully disagrees

In Fig. 5 referred to in the "DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS", Sriram '227 provides a timing diagram depicting a sequence of first, second, and third slot periods, *etc.*, while Fig. 2 referred to in the "BACKGROUND OF THE

INVENTION” is a block diagram of a match filter circuit of the prior art for detecting the primary synchronization code of FIG. 1. As such, FIG. 2 and FIG. 5 are not descriptively linked in the Sriram ‘227 specification. Namely, there is no description teaching or motivating that the odd ones or even ones of the sample signals are selected according to Fig. 2 and Fig. 5.

Furthermore, with respect to the sampling, what Sriram ‘227 specifically discloses that serial register **221** has  $15 \times n$  stages for storing *each successive sample* of the input signal **IN** (see, col. 2, lines 47-49). Therefore, according to the disclosure of Sriram ‘227, neither odd ones nor even ones of the sample signal are selected during a first period to be a first period signal. Therefore, the Examiner’s assertions are entirely groundless.

With this said, Applicant submits that claims 1 and 4 are not anticipated by Sriram ‘227 as the reference clearly fails to disclose “selecting even ones of the sample signals during a second slot period to be a second period signal if odd ones of the sample signals are selected during the first slot period, selecting odd ones of the sample signals during a second slot period to be a second period signal if even ones of the sample signals are selected during the first slot period,” as required by the claims.

Applicants further submit that Sriram ‘227 is incapable of rendering claims 1 and 4 unpatentable. In particular, the claims recite that *only half* of the sample signals in one slot period are alternately chosen to be the period signal during slot synchronization. For the same sampling rate, although both Sriram ‘227 and the claimed invention have the same amount of sample signals in one slot period, the claimed invention processes the *period signal* only – in other words, half the amount of Sriram ‘227. As such, the operation and design of the matched filter of the claimed invention is simpler since *fewer sample signals* are to be processed during each slot period as opposed to the Sriram ‘227 configuration.

For at least these reasons, claims 1 and 4 are neither anticipated nor rendered unpatentable by Sriram ‘227. Thus, claims 1 and 4 are clearly patentable. And because claims 5-8 depend from claims 1 and 4, claims 5-8 are patentable at least by virtue of dependency as well as for their additional recitations.

II. Newly added Claims 14, 15, &16.

New claim 14 recites another feature of the present invention in processing the frame synchronization. Claims 15 and 16 are newly added to recite one of the variations of the feature in processing the frame synchronization.

In particular, claim 14 recites that both the slot timings for the one before the previous slot period and the previous slot period could be regarded as a reference for a slot timing in processing frame synchronization during the current slot period, thus a slot timing with better value could be decided. Claims 15 and 16 recite that either the slot timing for the one before the previous slot period or the slot timing for the previous slot period could be selected as a slot timing in processing frame synchronization during the current slot period, thus a slot timing with better value could be chosen. Hence the timing inaccuracy caused by the frequency uncertainty during slot synchronization could be reduced, and a synchronization process including slot synchronization, frame synchronization and code-group/scrambling-code identification could be accelerated.

With respect to the process of the frame synchronization, the Examiner has agreed that Sriram '227 discloses that the mobile receiver matches the synchronization codes being transmitted and completes frame synchronization *by determining which of the 16 time slots is the first in the frame* (see, column 3, lines 9-13; see also, page 8, lines 18-21 of the Final OA dated 11/15/2007). Sriram '227, however, fails to perform the frame synchronization *by referring more than one slot timing* as required by claim 14 of the present invention. Sriram '227 also fails to perform the frame synchronization by using a slot timing selected *from more than one slot timing* as required by claims 15 and 16.

For at least these reasons, Applicant submits that the newly added claims 14-16 are also patentable.

III. Conclusion.

All matters having been addressed and in view of the foregoing, Applicant respectfully requests the entry of this Amendment, the Examiner's reconsideration of this application, and the immediate allowance of all pending claims.

Applicant's representative remains ready to assist the Examiner in any way to facilitate and expedite the prosecution of this matter. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number **03-3975**. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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